

ARGYLL MOTOR CARS

PRELIMINARY CATALOGUE

FOR 1905.



Gold Medal
ARGYLLS
BUILT IN THE
WORLD'S GREATEST
ENGINEERING CENTRE.

HOZIER ENGINEERING COY. LTD.
HOZIER ST., BRIDGETON GLASGOW.



THE 10-12 H.P. TWO CYLINDER ARGYLL CAR.

1904 MODEL . £380.

This Carriage is very roomy and comfortable; it is superbly finished and shows the high state of excellence to which the art of Motor Carriage building has now attained.

Preliminary Catalogue, 1905.

Telegraphic Address:
"AUTOCAR, GLASGOW."

Telephone Nos. { 3085 Bridgeton (National)-
3066
3067

DIRECTORS.

WM. ALEXR. SMITH (Chairman).
A. W. STEVEN.
ANDERSON RODGER.
ALEC GOVAN (Managing Director).



BANKERS.

Bank of Scotland, Glasgow and London.

AUDITORS.

Thompson, Jackson, Courlay & Taylor,
24 George Square, Glasgow.

SOLICITORS.

Mitchells, Johnston & Co.,
160 West George Street, Glasgow.

"Argyll"

MOTOR CARS . . .

AND

MOTOR

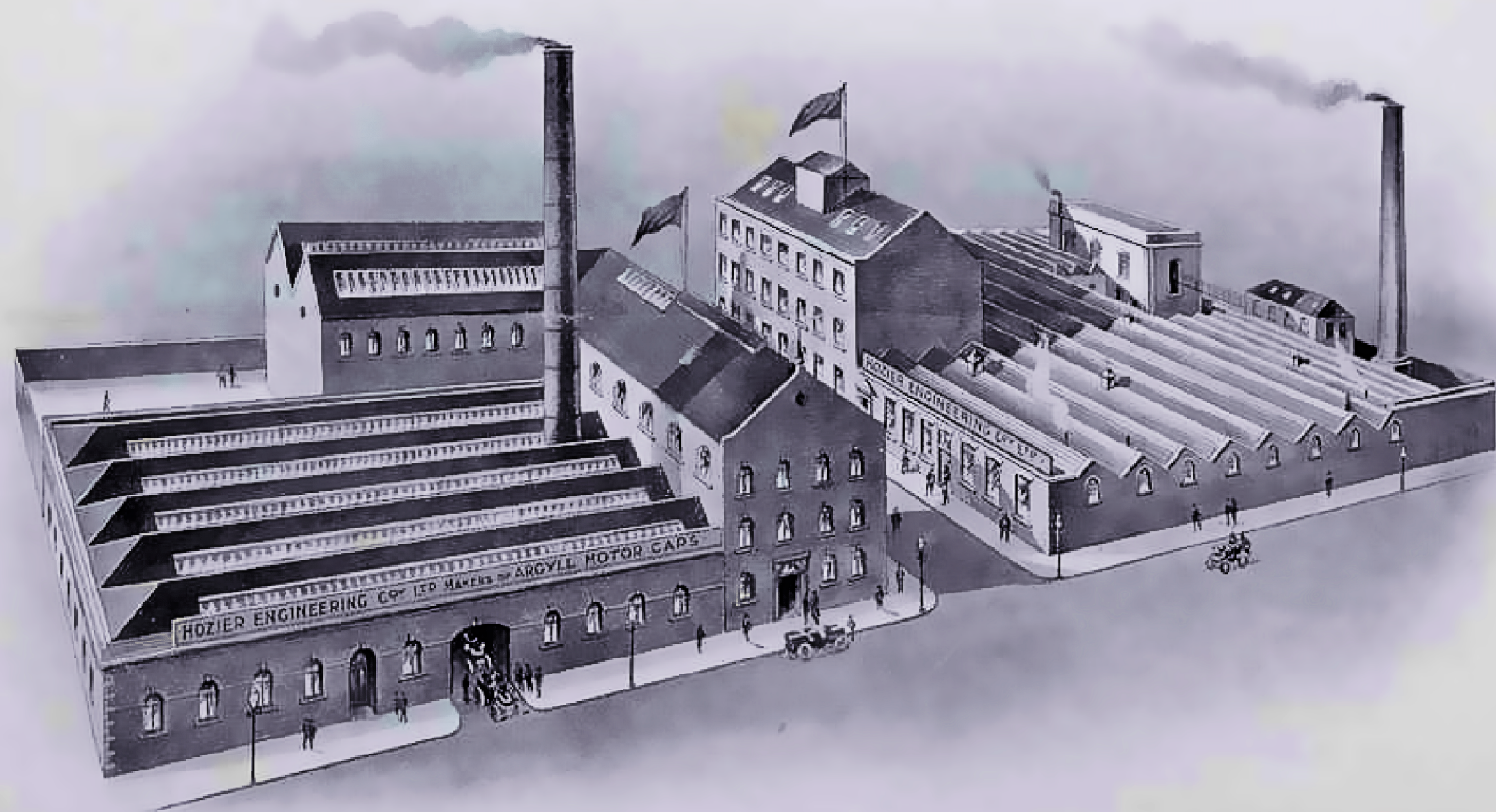
DELIVERY VANS

HOZIER ENGINEERING CO., Ltd.,

HOZIER STREET.

BRIDGETON. GLASGOW.

View of Works.



Introduction.



IN placing in the hands of our Agents and friends this Preliminary List of "Argyll" cars for Season 1905, we desire to thank them for the assistance they have rendered us during the past year, and to assure them that the cars which are illustrated herewith are as well worthy of their attention as were their predecessors.

Our constant aim is to simplify the mechanism and eliminate every point at all liable to failure or apt to be troublesome, and in our new designs we have succeeded in introducing several novel features of great value in this respect. Notable amongst them, we would direct attention to the **Patent Metal to Metal Clutch** which runs in an oil bath and cannot be damaged however much it may be allowed to slip; the new design of **expanding internal brakes**; and the **Patent Staggered Spoke Road Wheels**. These latter are specially designed to resist collapse by side slip, and are certified by Messrs. Kirkcaldy, the well-known experts in strengths of material, to be **two and a half times** as strong as the ordinary Artillery type wheel.

Both the two cylinder Aster engine and the three cylinder Argyll engine have been re-designed in order to secure more perfect balance and a greater rigidity, thus giving more silent running, greater flexibility and a longer life. An extra crank shaft bearing has been provided in the two cylinder engine, while all the bearings have been increased in length, and a more effective method of bolting has been adopted. As the result of much research a **specially suitable bearing metal** has been obtained, while the **finest known cast-iron** is employed in the cylinders, and the **best nickel steel** money can buy is used for the crank shafts. The commutators have been so arranged as to be very readily accessible. While the pumps are of a greatly improved pattern and are gear-driven. Care has been taken to place the pump in all cases so that it is readily

Introduction—Continued.

get-at-able and easily detachable for examination or repair. Provision has been made for the gear driving of High Tension Magneto when required.

We have given great attention to the question of effective cooling, and have been in communication with all the best known makers of radiators, as the result of which, and of our own experiments, we have solved the problem of keeping the engine cylinders at a reasonable temperature without carrying an unduly large quantity of water. This has been managed by employing separate cylinders, each with an exceptionally large water jacket, a well thought out arrangement of the water connections, and, most important of all, a **new and greatly improved form of Honeycomb Radiator**. To overcome the danger of leakage sometimes experienced with this type of cooling device, we provide a cradle in which the radiator is carried on a bed composed of soft material, which supports it completely, and prevents any strain coming on the joints due to road shocks. The radiator is assisted by a **powerful fan**, designed on correct scientific principles, and driven by a belt acting on pulleys of large diameter. An arrangement of eccentric bearing is employed so that this belt can readily be tightened by the simple application of a spanner.

The **well-known Govan Gear** has been retained, as it has proved so thoroughly satisfactory. Some improvements have been effected in details, however, such as the introduction of a ball bearing, to lessen the friction losses.

Ball bearings have been placed in the front road wheels, and are found to give most satisfactory results.

Our standard design of car body for 1905 is the **Roi-des-Belges**, as shown on illustrations herewith. These bodies are made from stamped sheet metal. In order to turn out our coach work in the best possible manner, we have lately secured a large works and equipped it with up-to-date plant, and we have every confidence in asserting that the **standard of excellence of workmanship and finish** of the "**Argyll**" cars leaving our factory is, without exception, equal to, if not higher, than that found on any other car on the British market, without respect to price.

In this catalogue we introduce our 20-24 h.p. model. This car is fitted with an "**Argyll**" four cylinder engine, in the design of which we have incorporated all the best points as determined by our large experience. Being intended as

Introduction—Continued.

a touring car, we have arranged a special roomy side entrance body, which has necessitated a wide wheel track. The frame is exceptionally massive in design, and is of pressed steel. Besides the novel features common to our other models, this type of car is fitted with a very neat form of knuckle joint to its cardan shaft. The features of this latter is the entire absence of back lash or undue wear and the protection of the joint from grit or mud. The axles are of especially liberal proportions and the differential case is so arranged as to allow of its being opened without removing the axle from the car.

The "Argyll" cars are justly famous for their reliability, simplicity of handling, and satisfactory running, together with the reasonableness of the prices charged.

During 1904 they have added greatly to their previous good reputation, as may be seen from the notes of some outstanding successes, *vide* page 6.

Complete Catalogue for 1905 in course of production. If desired we shall have pleasure in forwarding a copy when ready.



A corner of the Coach-Building Shop.

Some Proofs of Reliability and Endurance.

In 1901.—Easy winner of the Scottish Automobile Club's (Eastern Section) Hill-climbing Competition, beating high powered cars costing much more money.

Driven from Glasgow to London in 21½ hours.

Awarded Diploma of Merit, Glasgow International Exhibition.

In the Reliability Trials, organised by the Automobile Club of Great Britain, held at the Glasgow Exhibition, the **Argyll** was the only car in its class, whether of British or of Foreign manufacture, which did not lose a single mark for reliability. It also climbed all the hills on every route, including Whistlefield, with full complement of passengers. The distance was 535 miles. Not a single stop was recorded against the **Argyll**.

In 1902.—Awarded Medal for Gearing, Liverpool Motor Exhibition.

In 1903.—The **Argyll** gained Non-stop Certificate in the Glasgow to London run, organised by the Scottish Automobile Club.

The **Argyll** won Scottish Hill-climbing Competition.

The **Argyll** was driven through the 1,000 Miles Reliability Competition, organized by the Automobile Club of Great Britain, without losing a single mark for reliability, making non-stop runs every day. It also ran the total distance without adding water.

In 1903.—Automobile Club of Great Britain awarded Medal for the Gearing (Govan Patent).

Medal awarded at Paris Exhibition.

Medal gained for speed at Phoenix Park Races.

Medal gained for speed at Southport Races.

In 1904.—Yorkshire Automobile Club Speed Trials.
10 H.P. **Argyll**. 1st Class, III.

Irish Automobile Club Hill-climbing Test,
Dublin.

10-12 H.P. **Argyll**. 1st Class, B.

16-20 H.P. **Argyll**. 1st Class, C.

10-12 H.P. **Argyll** broke John o' Groats to Land's End Record by 3 hours 10 minutes.

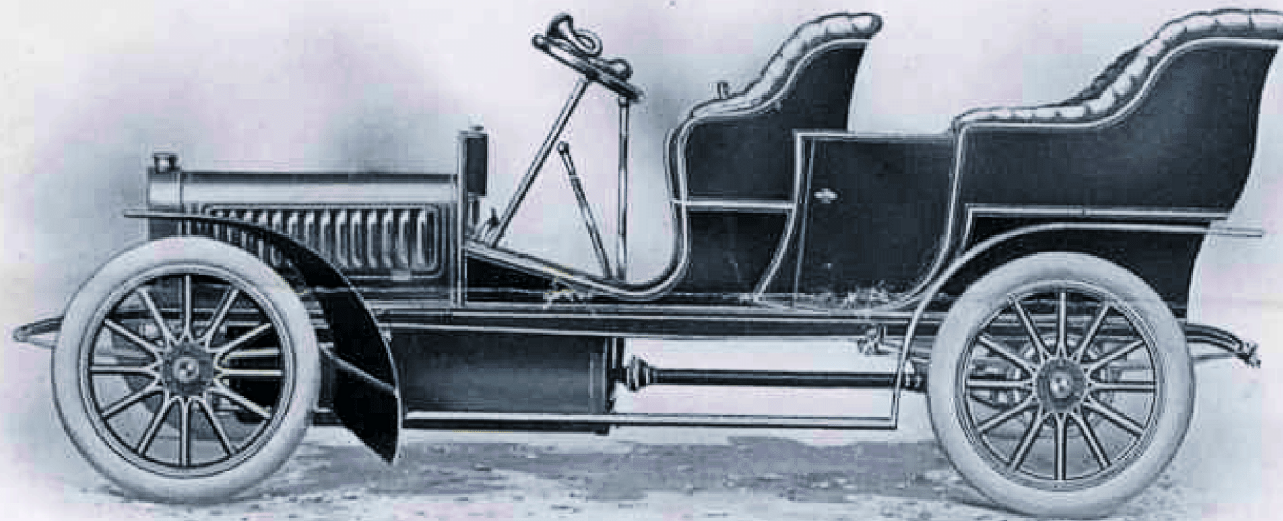
12-14 H.P. Three Cylinder **Argyll** broke John o' Groats to Land's End Record, then held by Mr. Cecil Edge, by 3 hours 20 minutes.
Time—42 hours 5 minutes.

10-12 H.P. **Argyll** was awarded 1st place in Sunrise Hill Competition, held by the Midland Automobile Club. In this Competition thirty-five cars entered, of twenty different makes, including a 70 H.P., 60 H.P., 40 H.P., 30 H.P., and five 28 H.P.'s.

Scottish Automobile Club Reliability Trials, Glasgow to London. 10-12 H.P. **Argyll** gained full marks for non-stop run, was first in London, and was awarded Gold Medal and highest marks.

20-24 H.P. Argyll Car.

(FOUR CYLINDER,)



SIDE ENTRANCE CARRIAGE.

Price, - = £700

16-20 H.P. Argyll Car.

SPECIFICATION.

Engine.—Aster, four cylinders, which are cast in pairs, 88 " bore $\times$ 130 " stroke, 20 B.H.P., fitted with mechanically operated valves. Governed on inlet.

Carburettor. Latest pattern Longuemare, fitted with hot-air circulating pipes to prevent freezing. Automatic air inlet.

Ignition. High tension with accumulators. High tension Magneto may be fitted at an extra charge.

Cooling.—Specially designed honey-comb radiator built with fluted tubes, giving large cooling surface, and fitted with pump and powerful fan, obviating the need for any other tank.

Lubrication. On the splash system, with external manual drip feed to main bearings.

Fly Wheel and Clutch. Combined new patent metal to metal clutch running in oil, the outstanding features being the elimination of the necessity to change the gear of the car while working through traffic, as the car may be driven at one mile per hour on the top gear. Easily adjustable from outside.

Gearing.—Govan patent.

Speeds.—8 $\frac{1}{2}$, 17 $\frac{1}{2}$, and 35 miles per hour when the engine is running at 1100 revolutions per minute. This may be accelerated to upwards of 40 miles per hour.

Wheels.—Patent Artillery pattern, 34 in. diameter, built with staggered spokes to resist the worst possible slide slip.

Standard Tyres. Michelin, 875 " $\times$ 105 " . This size gives an exceptional large tyre area and strength for the weight of the car, and overcomes any objection which can be raised to the use of pneumatics. Any other type to order.

Wheel Base. 9 ft.; wheel track, 4 ft. 1 $\frac{1}{2}$ in.; overall width, 5 ft.; overall length, 13 ft.

Steering.—Enclosed lock, irreversible pattern.

Back Axle.—Enclosed live axle running on roller bearings.

Front Axle. Built up front axle rigidly stayed. Hubs run on large ball bearings.

Frame. Pressed steel, patent design.

Body.—Standard pattern side entrance Roi-des-Belges of specially-stamped sheet metal, superbly finished with high-class fittings, upholstered in leather, furnished with pair of best paraffin lamps, pair of rubber mats, horn, one spare exhaust valve, and one spare inlet valve, complete set of spanners, set of spare bolts and nuts, oil cans, fillers, tyre inflator, and tyre repair outfit, grease injector and jack.

Weight.—Approximately, 16 $\frac{1}{2}$ cwt.

Price.—Side entrance, £550.

Fitted with Magneto, £20 extra

Do. Canvas Hood, 15 ..

Do. Canopy and Glass Front, 30 ..

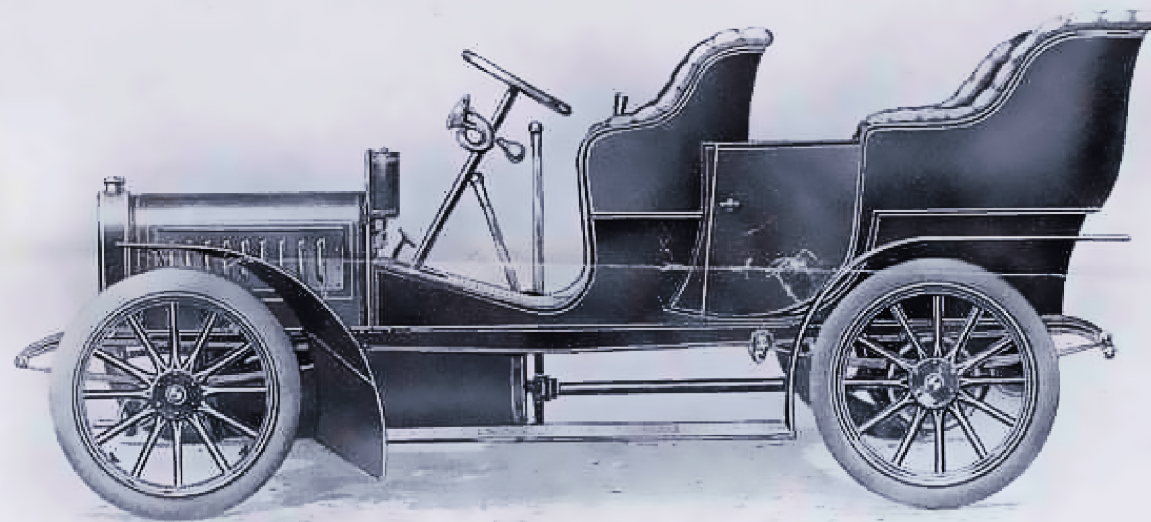
Do. Detachable Top, 60 ..

NOTE.—Side Doors are fitted with standard



16-20 H.P. Argyll Car.

(FOUR CYLINDER.)



SIDE ENTRANCE CARRIAGE.

Price, = = £550

12-14 H.P. Argyll Car.

SPECIFICATION.

Engine.—"Argyll," three cylinders, cast separately, governed on inlet. 90" bore $\times$ 120" stroke. 15 B.H.P. Fitted with mechanically operated valves.

Carburettor.—Latest pattern Longuemare, fitted with hot-air circulating pipes to prevent freezing. Automatic air inlet.

Ignition.—High tension with accumulators. High tension Magneto may be fitted at an extra charge.

Cooling.—Specially designed honey-comb radiator built with fluted tubes, giving large cooling surface, and fitted pump and powerful fan, obviating the need for any other water tank.

Lubrication. On the splash system, with external natural drip feed to main bearings.

Fly Wheel and Clutch.—Combined new patent metal to metal clutch running in oil, the outstanding features being the elimination of the necessity to change the gear of the car while working through traffic, as the car may be driven at one mile per hour on the top gear. Easily adjustable from outside.

Gearing.—Govan Patent.

Speeds.—5½, 13, and 26 miles per hour when the engine is running at 1100 revolutions per minute. This may be accelerated to upwards of 30 miles per hour.

Wheels.—Patent Artillery pattern, 32 in. diameter, built with staggered spokes to resist the worst possible side slip.

Standard Tyres.—Michelin, 810" $\times$ 390" $\times$ 30". This size gives an exceptional tyre area and strength for the weight of the car, and overcomes any objection which can be raised to the use of pneumatics. Any other type to order.

Wheel Base. Side entrance, 8 ft.; Tonneau, 6 ft. 11½ in.; track, 4 ft. 1½ in.; total length, side entrance, 12 ft.; Tonneau, 11 ft.; total width, 4 ft. 10 in.

Steering. Enclosed lock, irreversible pattern.

Back Axle.—Enclosed live axle running on roller bearings.

Front Axle. Built up front axle rigidly stayed. Hubs run on large ball bearings.

Frame. Pressed steel, patent design.

Body.—Standard pattern side entrance Roi-des-Belges of specially stamped sheet metal, superbly finished with high-class fittings, upholstered in leather, furnished with pair of best paraffin lamps, pair of rubber mats, horn, one spare exhaust valve, and one spare inlet valve, complete set of spanners, set of spare bolts and nuts, oil cans, fillers, tyre inflator, and tyre repair outfit, grease injector, lifting jack.

Weight.—Approximately, 14 cwt.

Price.—Side entrance, **£455**; Tonneau, **£425**.

Fitted with Magneto, - - - **£20** extra.

Do. Canvas Hood, - - - **15** ..

Do. Canopy and Glass Front, - **30** ..

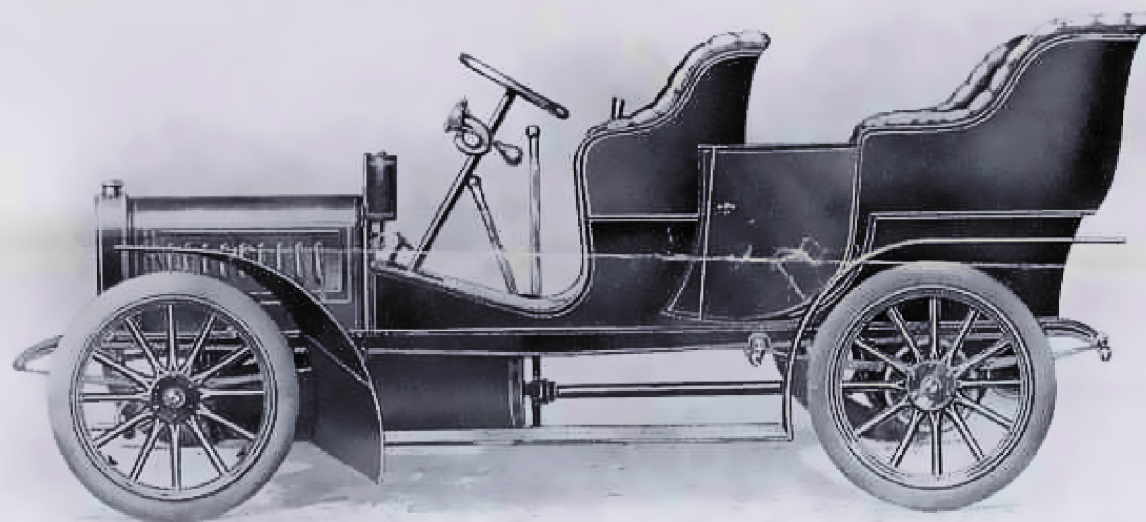
Do. Coupé made interchangeable with Tonneau Seats, - **65** ..

Do. Detachable Top, - - - **60** ..

NOTE.—Side Doors are fitted to front seats as standard.

10-12 and 12-14 H.P. Argyll Cars.

(TWO CYLINDER and THREE CYLINDER.)



SIDE ENTRANCE CARRIAGE.

Price,	with 10-12 H.P. Two Cylinder Engine,	=	=	£380
	„ 12-14 „ Three „ „	=	=	£455

10-12 H.P. Argyll Car.

SPECIFICATION.

Engine.—Aster, two cylinder 95 $\frac{3}{16}$ in. bore $\times$ 130 $\frac{3}{16}$ in. stroke, cylinder scast separately, inlet and exhaust valves on opposite sides, mechanically operated, 13 B.H.P.

Carburettor.—Latest pattern Longuemare, fitted with hot-air circulating pipes to prevent freezing. Automatic air inlet.

Ignition.—High tension with accumulator. High tension Magneto may be fitted at an extra charge.

Cooling.—Specially designed honeycomb radiator built with fluted tubes, giving large cooling surface, and fitted with pump and powerful fan, obviating the need for any other water tank.

Lubrication.—On the splash system, with external natural drip feed to main bearings.

Fly Wheel and Clutch.—Of conical type, male portion leather lined; self contained and so arranged that it all turns together and puts no end thrust on the bearings; easily adjustable from the outside.

Gearing.—Govan patent.

Speeds.—6½, 13, and 26 miles per hour when the engine is running at 1100 revolutions per minute. This may be accelerated to upwards of 30 miles per hour.

Wheels.—Patent Artillery pattern, 32 in. diameter, built with staggered spokes to resist the worst possible side slip.

Standard Tyres.—Michelin, 810 $\frac{3}{16}$ in. $\times$ 90 $\frac{3}{16}$ in. This size gives an exceptional large tyre area and strength for the weight of the car, and overcomes any objection which can be raised to the use of pneumatics. Any other type to order.

Wheel Base.—Side entrance, 8 feet.; Tonneau, 6 ft. 11½ in.; track, 4 ft. 1½ in.; total length side entrance, 12 ft.; Tonneau, 11 ft.; total width, 4 ft. 10 in.

Steering.—Enclosed lock, irreversible pattern.

Back Axle.—Enclosed live axle running on roller bearings.

Front Axle.—Built up front axle rigidly stayed. Hubs run on large ball bearings.

Frame.—Pressed steel, patent design.

Body.—Standard pattern side entrance Roi-des-Belges of specially stamped sheet metal superbly finished with high-class fittings, upholstered in leather, furnished with pair of best paraffin lamps, pair of rubber mats, horn, one spare exhaust valve and one spare inlet valve, complete set of spanners, set of spare bolts and nuts, oil cans, fillers, tyre inflator and tyre repair outfit, grease injector, lifting jack.

Weight.—Approximately, 14 cwt.

Price.—Side entrance, £380. Tonneau, £350.

Fitted with Pump, - - - -	£5 extra.
Do. Magneto, - - - -	20 ..
Do. Canvas Hood, - - - -	15 ..
Do. Canopy and Glass Front, -	30 ..
Do. Coupé made interchangeable with Tonneau Seats, -	65 ..
Do. Detachable Top, - - - -	60 ..

NOTE.—Side Doors are fitted to front seats as standard.

THE SCOTTISH AUTOMOBILE CLUB
(WESTERN SECTION).

 CERTIFICATE

Glasgow to London Reliability Trial for Touring Cars,
19th and 20th MAY, 1904.

Vehicle No. *H*

Class B.—Vehicles having Two Cylinders.

This is to Certify that the vehicle entered by *Messrs. The Hozier Engineering Co. Limited*
and described by them as being a *10 H.P. Argyll car*
Motive Power Petrol, Brake Horse Power *12*, Seating Capacity *4*, Number of Cylinders *2*, Selling Price Complete
£350, Approximate Weight Unladen *13 cwt.*, Actual Laden Weight (with Passengers) *1 ton, 1 cwt., 3 qrs.*, and fitted with
Clunche Michelin Tyres, Carried *4* Passengers, and made an absolute Non-Stop Run, and obtained the full total of 1000 marks,
and has been awarded the *Gold Medal* applicable to its class.

In the Hill-Climbing Test at Woodcock Hill, Elstree, the time occupied was *—* minute *58* seconds, equal to *8.34* miles per hour, and the
Marks obtained therefor *2152*. These are arrived at on the basis of the following formula:—

$$(W \times G \times L) + (W \times H) + (W \times V)$$

$$K \times D \times \left(\frac{C}{D^2}\right)$$

L = Laden Weight of car in tons.
L = Length of hill in feet.
W = Laden Weight of car in lbs.
H = Height of hill in feet.

EXPLANATION OF SYMBOLS.
V = Velocity in feet per second.
A = Area of piston in square inches.
C = Number of cylinders.
D = Stroke in inches.

G = Gradient or number of revolutions of engine for
one revolution of road wheel (without gear).
D = Diameter of road wheel in feet.

Woodcock Hill is 750 feet in length, 125 feet in height, and has an average gradient of 11.5, and a gradient of 27 at one portion.

IN NAME AND BY AUTHORITY OF THE CLUB COMMITTEE.

Signed at Glasgow, this 15th day of June, 1904.

John Brown
Robert Smith

Chairman.

Hon. Secretary.

20-24 H.P. Argyll Car.

SPECIFICATION.

Engine.—"Argyll," four cylinders, which are cast separately, ensuring a more perfect casting, more effective cooling, and maximum accessibility for repair. Cylinders $95\frac{m}{m}$ bore $\times$ $130\frac{m}{m}$ stroke, fitted with mechanically operated inlet valves. Magneto and pump gear-driven. Governed on inlet. Commutator in most accessible position. Brake horse power 24.

Carburettor.—Latest pattern Longuemare, fitted with hot-air circulating pipes to prevent freezing. Automatic air inlet.

Ignition.—High tension with accumulators, and high tension Magneto on one set of sparking plugs.

Cooling.—Specially designed honeycomb radiator built with fluted tubes, giving large cooling surface, and fitted with pump and powerful fan, obviating the need for any other water tank.

Lubrication.—On the splash system, with external natural drip feed to main bearings.

Fly Wheel and Clutch.—Combined new patent metal to metal clutch running in oil, the outstanding features being the elimination of the necessity to change the gear of the car while working through traffic, as the car may be driven at one mile per hour on the top gear. Easily adjustable from outside.

Gearing.—Govan patent.

Speeds.— $8\frac{1}{2}$, $17\frac{1}{2}$, and 35 miles per hour when the engine is running at 1100 revolutions per minute. This may be accelerated to upwards of 40 miles per hour.

Wheels.—Patent Artillery pattern, 35 in. diameter, built with staggered spokes to resist the worst possible slide slip.

Standard Tyres.—Michelin, $880\frac{m}{m} \times 120\frac{m}{m}$. This size gives an exceptional large tyre area and strength for the weight of the car, and overcomes any objection which can be raised to the use of pneumatics. Any other type to order.

Wheel Base.—9 ft. 3 in.; wheel track, 4 ft. 6 in. Total length, 13 ft. 6 in.; total width, 5 ft. 6 in.

Steering.—Enclosed lock, irreversible pattern.

Back Axle.—Enclosed live axle running on roller bearings.

Front Axle.—Built up front axle rigidly stayed. Hubs run on large ball bearings.

Frame.—Pressed steel, patent design.

Body.—Standard pattern side entrance Roi-des-Belges of specially stamped sheet metal, superbly finished with high-class fittings, upholstered in leather, furnished with pair of best paraffin lamps, pair of rubber mats, horn, complete set of spanners, one spare exhaust valve, and one spare inlet valve, set of spare bolts and nuts, oil cans, fillers, tyre inflator, and tyre repair outfit, grease injector and jack.

Weight.—Approximately, 19 cwt.

Price.—£700.

Fitted with Canvas Hood, - - - £20 extra.

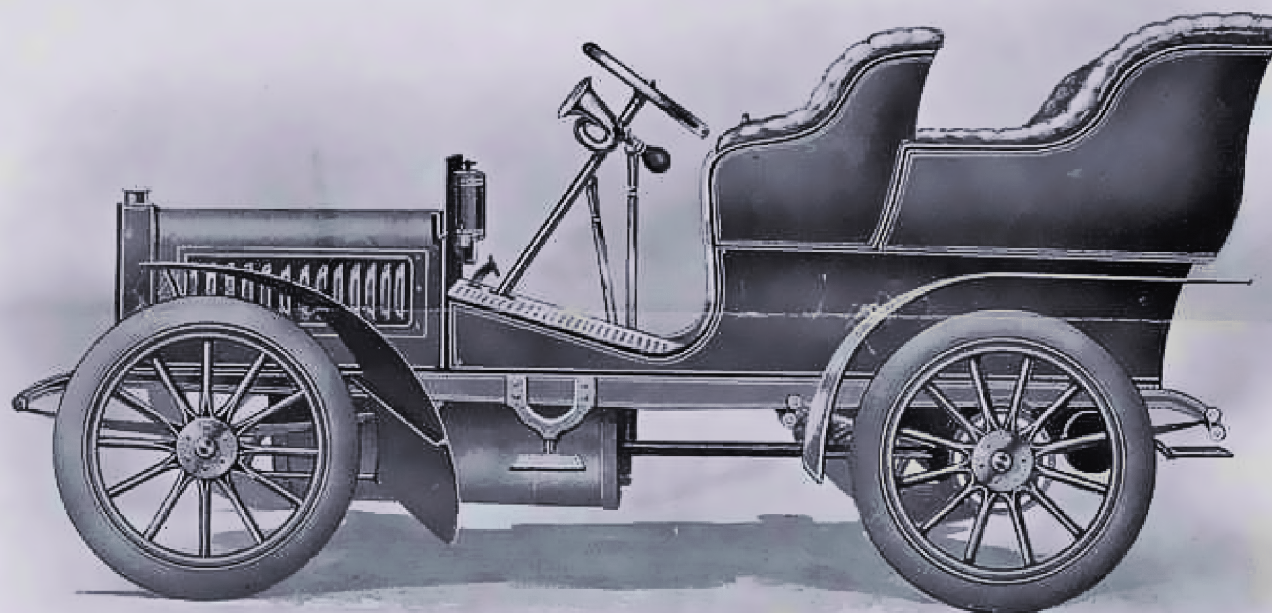
Do. Canopy and Glass Front, - 30 ..

Do. Detachable Top, - - 60 ..

NOTE.—Side Doors are fitted to front seats as standard.

10-12 and 12-14 H.P. Argyll Cars.

(TWO CYLINDER and THREE CYLINDER.)

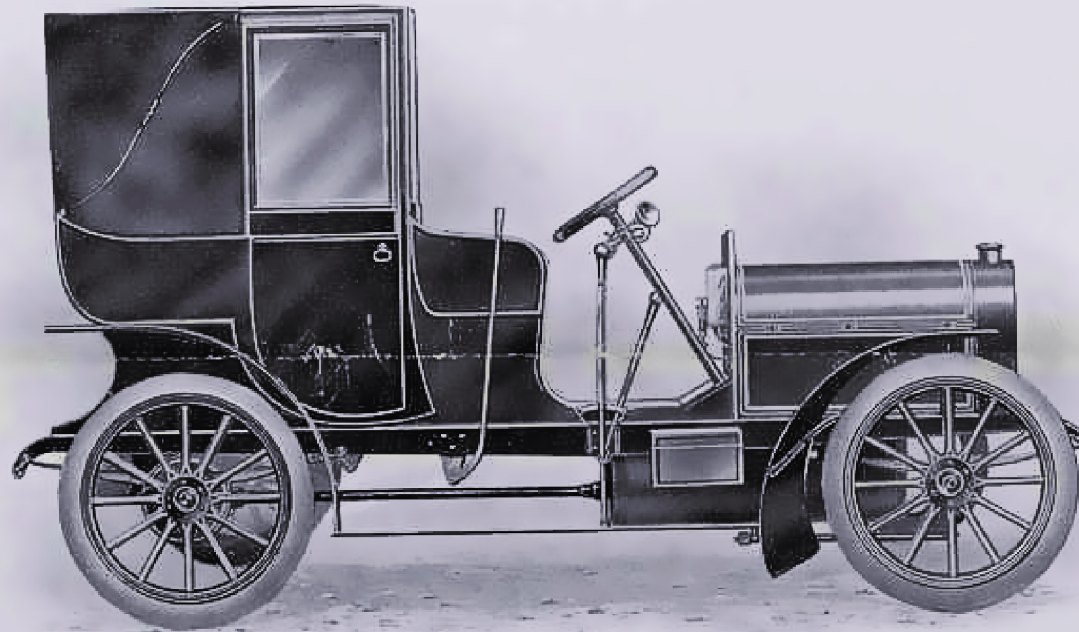


TONNEAU.

Price,	with Two Cylinder Engine,	=	=	£350
	„ Three „ „	=	=	£425

10-12 H.P. Argyll Landaulet.

(TWO CYLINDER.)



CLOSED.

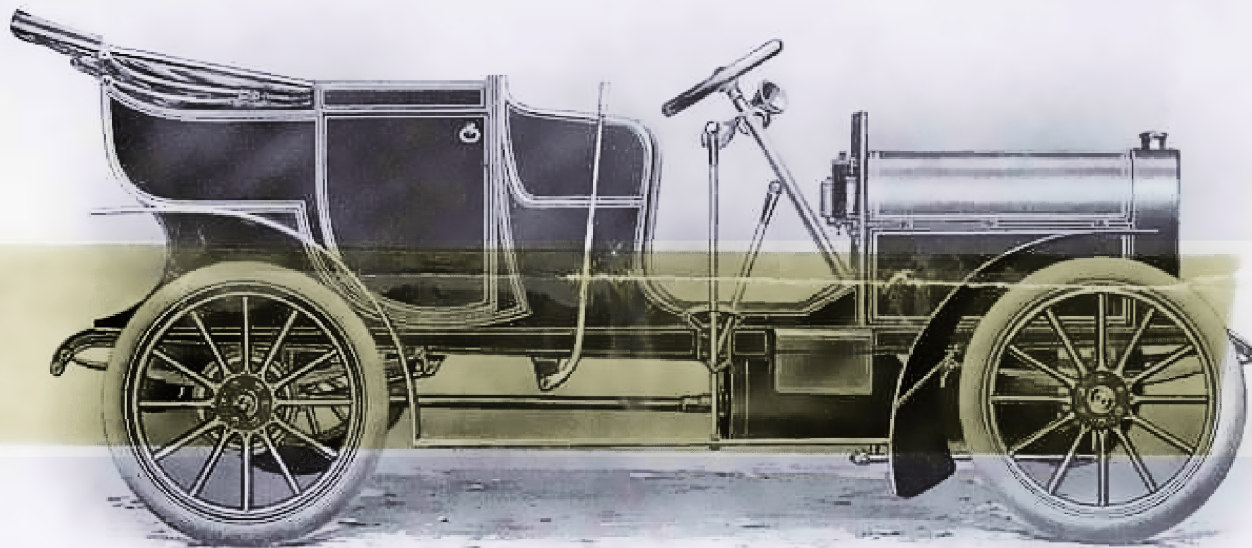
Price, = = **£450**

Wheel Base, 8 ft. ; Wheel Track, 4 ft. 1½ in. ; Total Length, 12 ft. ; Total Width, 4 ft. 10 in. ; Weight Approximately, 16½ cwt.

Specification otherwise as on page 14.

10-12 H. P. Argyll Landaulet.

(TWO CYLINDER).



OPEN.

Price, = = £450

Guarantee and Terms.

WE give the following Guarantee with our Motor Cars, instead of the guarantee implied by statute or otherwise, as to the quality or fitness for the purpose of motoring, of goods supplied by us; any such implied guarantee being, in all cases, excluded. In the case of cars which have been used for "hiring out" purposes, no guarantee of any kind is given or is to be implied.

We guarantee, subject to the conditions mentioned below, that all precautions which are usual and reasonable have been taken by us to secure excellence of materials and workmanship, but the purchaser shall not be entitled to claim any damages for injury to car or occupants. We undertake, subject to the conditions mentioned below, to make good, at any time within three months from date of purchase, defects in our cars, except in regard to the tyres. This guarantee does not apply to defects caused by wear and tear, misuse or neglect.

If a defective part should be found on any of our cars, it must be sent to us **Conditions of Guarantee.** *Carriage Paid*, and be accompanied by an intimation from the sender that he desires to have it repaired free of charge under our guarantee, and furnish us at the same time with the number of the car, the name of the Agent from whom he purchased, and the date of purchase.

We guarantee only those cars which are bought either direct from us or from any of our duly authorised agents.

The term "AGENT" is used in a complimentary sense only, and those firms whom we style our agents are not authorised to advertise, incur any debts, or transact any business whatsoever on our account; nor are they authorised to give any warranty or make any representation on our behalf other than those contained in the above guarantee.

The printed Specifications of the various types of cars as detailed are those in force at the time of issue of this Catalogue. We claim the right, however, to so far amend or modify these at any future date as we may consider necessary, without any notice being given to the public. Alterations also may be made in prices.

Guarantee and Terms—Continued.

Prices quoted in this Catalogue are *Net Cash*.

Terms of Business.

Delivery is made either at our works in running order, F.O.R. or free alongside vessel.

One-third cash must accompany the order, and balance on intimation that the car is at the purchaser's disposal in our works.

For shipment, or rail in Britain, we pack our cars in strong crates. These are charged at their net cost price, which is credited in full when returned carriage paid in good condition.

For export orders our cars are cased; the packing and cases are charged at the net cost price and are not returnable.

On receiving goods customers should carefully inspect, and, if damaged, make an immediate claim on the Carriers for same, as these are signed for as being received in good condition by the Railway or Shipping Companies. The latter becomes the agent for the purchaser; the purchaser pays all carriage charges, etc.

Cheques and Post Office Orders should be made payable to THE HOZIER ENGINEERING COMPANY, LIMITED, and crossed & Co.

Customers' Cars will only be driven by our Employees at the customers' risk.

All Repairs or Alterations must be paid for when completed, and before the Car or Part, as the case may be, is returned to the owner.

Medals.

GOLD MEDAL,
For RELIABILITY and HILL-CLIMBING.



Scottish Automobile Club (Western Section),
Glasgow to London Trials, 1904

SILVER MEDAL,
Awarded for GEARING
1000 Miles Reliability Trials, 1903



For GEARING at LIVERPOOL, 1903.



For SPEED at SOUTHPORT, 1903.

SILVER MEDAL, LIVERPOOL, 1904.



For SPEED at PHOENIX PARK, 1903.